

HTC T-1  
DOCKET NO. 7702

**DIRECT TESTIMONY AND EXHIBITS OF**

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**SUBJECT: THE APPROPRIATE REGULATORY FRAMEWORK  
FOR CREATING A COMMUNICATIONS  
INFRASTRUCTURE FOR HAWAII**

1 marketing strategy are not conducive to the efficient gathering of  
2 information by consumers. In such circumstances, the reseller should be  
3 subject to price and minimum service quality regulation just as is the  
4 case with the facility-based provider. It is my opinion that this is not an  
5 inefficient barrier to entry by firms, but rather an efficient safeguard to  
6 protect consumers and facilitate provision of services in an  
7 interconnected, interdependent network. The focus of such regulation of  
8 resellers should definitely not be on their profits, but on the quality,  
9 reliability and price of the service provided. Accordingly, the Commission  
10 might insist on price lists of services being provided and made available  
11 to it and to the consuming public, and also retain the authority to perform  
12 service quality audits and price checks on a random basis.

13 SECTION IV

14 3. RESTRUCTURE OF GTE HAWAIIAN TEL RATES

15 Q. What restructuring of GTE Hawaiian Tel's rates should the Commission  
16 allow prior to authorizing increased competition?

17 A. In the arena of establishing efficient pricing of services, the Commission  
18 should:

- 19 \* Allow rebalancing and deaveraging of GTE Hawaiian Tel prices  
20 (local, interisland toll and access) prior to or coincident with  
21 competitive entry as required;
- 22 \* Permit customer specific contracts (including interisland toll) for all  
23 services where other certified carriers are allowed to offer  
24 contracts; and promote symmetric pricing flexibility and regulatory  
25 parity among providers of like services;
- 26 \* Expand compensation arrangements on the basis of an

1           Originating Responsibility Plan (ORP) to include all certified (or  
2           chartered) carriers;

3           \*     Recognize that compensation costs are legitimate incremental  
4           costs of production of GTE Hawaiian Tel and alternative carrier  
5           services and must be reflected in their prices;

6           \*     Move toward an integrated set of "access charges" not based on  
7           carrier identity. (The Company's intrastate access charge  
8           proposal is discussed in detail in Ms. Robinson's testimony, HTC  
9           T-2.)

10          In the policies concerned with interconnection, the main issues are  
11          closely associated with issues of pricing and potential unbundling. I will  
12          discuss the policy to be adopted in the area of the unbundling of new  
13          services later in my testimony.

14    Q.     Would you agree that current switched access charges are not  
15           appropriate for the pricing of terminating local traffic?

16    A.     At this time, GTE Hawaiian Tel has no switched access tariff for intraLATA  
17           or local traffic. Ms. Robinson's testimony will address that requirement.  
18           Certainly, however, the current level of interstate switched access  
19           charges is not appropriate. The existing access charge rate levels were  
20           not established in a marketplace which envisioned the development and  
21           expansion of local exchange competition to the services provided by the  
22           incumbent local exchange company. However, I do not think that such a  
23           statement goes nearly far enough in assessing the correct policies which  
24           must be pursued if the Commission grants the application of new  
25           entrants to provide local exchange services in competition with GTE  
26           Hawaiian Tel. The current forms of regulation imposed on GTE Hawaiian

1       Tel certainly did not take into account the development of increasingly  
2       competitive markets for local exchange services.

3       As an interim step on the way to restructuring access charges, GTE  
4       Telephone Operations has proposed the same type of mechanism in a  
5       number of states including Illinois, Michigan, and most recently Iowa and  
6       Pennsylvania. The interim policy called for is essentially one of creating  
7       a new factor which might be called Percent Local Usage ("PLU"), similar  
8       to the Percent Interstate Usage ("PIU") factors currently employed in the  
9       settlements process between local exchange carriers ("LECs") and  
10      interexchange carriers ("IXCs") in other jurisdictions. However, the price  
11      for the local usage portion of the traffic delivered to GTE Hawaiian Tel by  
12      a certified interconnected company is not zero (\$0.00) per minute of use  
13      as would be the case in a Bill and Keep structure, but would essentially  
14      be the price(s) contained in GTE Hawaiian Tel's proposed local  
15      measured service tariffs in Docket No. 7579 - the same usage prices as  
16      would be applied to entities such as Shared Tenant Service providers  
17      and end users taking an optional measured service plan. The interim,  
18      the rates of interstate switched access will continue to be those already  
19      contained in GTE Hawaiian Tel's interstate switched access tariff.

20    Q.    Why do you suggest that such a proposal is only an interim  
21           arrangement?

22    A.    With no pejorative intent, it is obvious that there exists a very significant  
23           financial incentive for a carrier to misreport the nature of its traffic under  
24           this proposal. The incentive is even greater under a Bill and Keep  
25           proposal. As a matter of general business practice, I do not believe it is  
26           sound policy for either this Commission or GTE Hawaiian Tel to give

1 customers, and in this case competitors as well, the financial incentive to  
2 misrepresent the nature of their traffic to GTE Hawaiian Tel or to the  
3 Commission. Furthermore, with the development of geographic number  
4 portability being urged by many of the parties, it is obvious that there will  
5 be numerous cases in which neither carrier necessarily knows the  
6 jurisdictional nature of the call, rendering the distinction between local  
7 and toll completely irrelevant, much as it already is for cellular carriers  
8 today.

9 Q. Do you have a longer term solution in mind which would solve this  
10 dilemma?

11 A. Yes. It is a proposal which calls for a rebalancing of GTE Hawaiian Tel's  
12 prices consistent with the ever increasing level of competition in all  
13 markets and is not based on the identity of the party taking service from  
14 GTE Hawaiian Tel, as all our tariffs call for in the current regulatory  
15 environment.

16 Q. Please address from an economic and public policy perspective what  
17 this overall rebalanced rate structure might look like in the long run.

18 A. It is interesting to examine what such an overall rebalanced price  
19 structure might look like in light of the competitive market conditions  
20 faced by GTE Hawaiian Tel today and those which can be readily  
21 anticipated in the future. Prospectively, GTE Hawaiian Tel is concerned  
22 with migrating the current price structure from the fragmented patchwork  
23 of toll, access, and local rates that exist today toward a single integrated  
24 structure, much as our competitors, particularly the cellular carriers, have  
25 already been able to do. In fact, the access pricing proposal which  
26 Ms. Robinson will present will certainly be seen as an effort to

1 accomplish this result, at least in part. In this pricing structure, telephone  
2 companies must develop flat rates designed to recover the amount of  
3 subscriber "loop" costs and usage rates to cover the traffic sensitive  
4 switching and transport costs. Further, these usage rates must become  
5 time and distance sensitive, where cost and demand justified, for all  
6 classifications of service that are presently offered: interstate access,  
7 intrastate access, intraLATA toll, and local. All prices in this competitive  
8 pricing structure must be derived from the market forces of supply and  
9 demand. Aligning all prices to at least recover long run incremental costs  
10 avoids cross-subsidization among customers, reduces reliance on  
11 arbitrary class of service and rate group characterizations, achieves  
12 equity, promotes price stability, and allows GTE Hawaiian Tel and  
13 consumers greater flexibility in responding to competitive alternatives. In  
14 fact, it may even allow competitors of GTE Hawaiian Tel the ability to  
15 develop creative alternatives.

16 It is important to recognize that, in its ultimate form, such a competitive  
17 pricing structure must eliminate arbitrary classifications such as "toll",  
18 "access usage", and "local usage", and focus on the provision of  
19 switched traffic in a single integrated rate structure that is time and  
20 possibly distance sensitive.

21 Under this unitary pricing approach, there would be a single multi-part  
22 tariff applicable to both intra- and interisland calling. For example, a  
23 basic monthly rate for network access would be charged and a usage  
24 rate structure applied to all calling. The cost of an intercity call would be  
25 the usage charge for end office switching on each end plus the  
26 applicable transport charge (including any compensation costs which

1 might be incurred), but still offered to customers as a composite rate or in  
2 service packages, if the firms so desired.

3 This is illustrated graphically in Exhibit HTC-102, page 1 of 2, entitled  
4 Representative Rate Structure. In this Exhibit, inside wire and customer  
5 premise equipment are assumed to be deregulated and are priced on a  
6 competitive basis. The loop and line sensitive portion of the LEC central  
7 office would be priced on a monthly recurring (flat-rated) basis with the  
8 same rate applicable to all customers for a given set of service functional  
9 characteristics. This network connection, or network access, charge is  
10 the first part of the multi-part tariff.

11 The second part of the tariff is a usage charge, applicable to all end office  
12 switching and transport of usage, regardless of whether the call is toll,  
13 access, or local under today's definitions. As drawn, this rate structure  
14 reflects both time-of-day and distance in the applicable prices. In the  
15 upper diagram, labeled Peak Usage, two distance bands are shown.  
16 The illustrative price per minute of use is given for marginal minutes of  
17 use in each of the distance bands: \$0.01 for intraoffice usage; \$0.03 for  
18 distance band 1. As drawn, these prices display a declining block  
19 structure within each distance band to reflect the anticipated cost  
20 characteristics of the newer technologies. Inframarginal prices<sup>3</sup> would  
21 be somewhat higher than those shown for marginal usage to satisfy the  
22 revenue requirement in light of the economies of scope and scale  
23 present in the network. The price structure for Off-Peak Usage is similar

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3 Inframarginal prices refer to prices in a declining block or other nonlinear rate structure which precede the last, trail, or marginal price. Such prices are "infra", for they support the overall rate structure; they are also marginal because for some customers with smaller volumes of usage or unit of demand, they become the marginal price. Therefore, the term "inframarginal".

1 with two distance bands again illustrated. For illustrative purposes, the  
2 off-peak marginal prices are 50% of those applicable in the Peak period.

3 Q. What are the advantages of this approach when compared to the pricing  
4 of network services under current pricing approaches or a bill and keep  
5 approach?

6 A. This approach has definite advantages over present practices and is also  
7 superior to a "bill and keep" arrangement frequently proposed. For  
8 example, the enforcement and definition problems inherent in placing a  
9 differential access charge on "interstate" or "interisland" facilities and  
10 usage alone are avoided. Customers are not given an economic signal  
11 to switch from a direct to an indirect method of access to the network.  
12 Also, such an approach would appear substantially easier to apply in a  
13 way that is equitable to all customers and competitors in the  
14 telecommunications market. For example, the definition debate which  
15 the parties and the Commission might have to go through to determine  
16 which minutes are local and which are toll, along with the associated  
17 costs of that debate can be avoided. An additional advantage offered by  
18 this approach is the flexibility it offers to both customers and to the  
19 Company.

20 The key to long-run success in an increasingly competitive market is  
21 flexibility and adaptation, not only in pricing which is my immediate  
22 concern here, but in all areas of the LEC's operations. The emphasis  
23 given to price level and structure is a belief based on empirical evidence  
24 in the intercity market that a key element of competition in the future will  
25 be on the basis of price; it will not be the sole playing field on which the  
26 game is contested, other relevant table stakes will include quality and



1 advertising, but pricing policy will be a principal method by which  
2 competition among firms manifests itself.

3 Q. Are there any other implications of the long run pricing proposal?

4 A. Yes. The existence of competition combined with the possibility of resale  
5 implies that a sustainable pricing structure must eschew the traditional  
6 mechanisms of segmenting users (such as residence, business,  
7 interexchange carrier), of segmenting uses (such as voice, data, or  
8 video), and of segmenting regulatory jurisdiction (interstate, intrastate,  
9 toll/local). Rather, feature requirements, volume of usage and the costs  
10 of providing service will have to become the basic mechanisms for  
11 developing prices in the marketplace. In particular, the usage elements  
12 of such a competitive pricing structure should specify prices that vary with  
13 the quantity of usage in the form of a nonlinear multi-part tariff. GTE  
14 Hawaiian Tel's Exhibit HTC-102, page 2 of 2, illustrates such a rate  
15 structure.<sup>4</sup>

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4 In the top half of this Exhibit, the prices to be charged for each block of usage are illustrated. Units of output between zero and  $Q_1$  are charged at a rate of  $P_1$ ; between  $Q_1$  and  $Q_2$ , price  $P_2$  prevails; between  $Q_2$  and  $Q_3$ , price  $P_3$  applies; all units subsequent to  $Q_3$  would be priced at the rate of  $P_4$  which approximates the marginal cost of usage. This same rate structure will also incorporate distance and time-of-day considerations. That is, if rates  $P_1$  to  $P_4$  are thought of as the peak period prices, then in this Schedule, the prices  $P_1'$  to  $P_4'$  would represent the nonlinear multi-part rate structure associated with off-peak usage prices. Careful note should be taken that these off-peak rates may, in fact, be equal to zero in some cases, as is the example shown for  $P_4'$ . The element of distance would be included by appropriately increasing the individual prices for subsequent mileage bands. That is, the nonlinear multi-part structure would be repeated for longer distance bands, but with the individual prices within each subsequent band being higher than in the previous band to reflect the costs associated with the longer length of transport. In the bottom half of Exhibit HTC-102, page 2 of 2, these prices are translated into revenues on a per end user line basis including the recurring monthly connection price. Point A represents the monthly network connection price to be collected on a flat rate basis. The slope of each line segment in the bottom half of the exhibit corresponds to the price of usage in the upper half of the exhibit. In this sense, the nonlinear multi-part structure is equivalent to providing volume discounts to the end user, regardless of the customer's identity.

1       Such a nonlinear competitive pricing structure offers several advantages.  
2       First, the notion of paying less per incremental unit for large volumes of  
3       usage is intuitively fair, especially when on the low end of the usage  
4       spectrum, this is coupled with a targeted lifeline rate option for low-  
5       income customers, such as the FCC's Link-Up America Plan, the existing  
6       plan in Hawaii, or the plan to be discussed by Mr. Weller and  
7       Mr. Williams. Second, the nonlinear multi-part competitive pricing  
8       structure avoids the economic distortions created by the traditional  
9       market segmentation definitions currently employed in the telephone  
10      industry. This, in turn, could reduce the regulatory costs necessary to  
11      enforce and police the prevailing market segmentation classification. For  
12      example, all users of line-side network connections, whether residence,  
13      business, or interexchange carrier, would pay for line-side network  
14      connection and usage pursuant to the same nonlinear multi-part rate  
15      structure, thereby eliminating all tariff restrictions based on user identity  
16      or the purpose of the usage. That is, GTE Hawaiian Tel becomes  
17      indifferent to both the use to which the network is put and the identity of  
18      the user of the network. Under this type of rate structure and associated  
19      rate levels, the prohibitions on resale of services can be eliminated, as I  
20      discussed earlier. The nonlinear multi-part structure also recovers costs  
21      which are directly attributable to the switching and transport of network  
22      usage from prices based on the volume of usage consumed, while at the  
23      same time satisfying the economic efficiency condition that price should  
24      be equal to marginal cost. This latter characteristic clearly reduces the  
25      threat of inefficient bypass, specifically for large volume users such as  
26      interexchange carriers, by pricing their incremental usage at a level

1 approximately equal to their incremental cost.

2 Finally, and perhaps most importantly, a nonlinear multi-part competitive  
3 pricing structure can ultimately be viewed as providing a substitute for  
4 jurisdictional separations by integrating into a unified rate structure,  
5 prices for network access, exchange, intraLATA, and interexchange  
6 usage.

7 Q. Can the rebalanced rate structure you just described be implemented in  
8 the current marketplace?

9 A. Not in one giant step perhaps, but there are certainly approximations of  
10 such a rate structure which may prove almost as efficient, particularly in  
11 the form of a series of optional local exchange tariffs. I am not stating that  
12 the rate structure necessarily implies mandatory measured service must  
13 be ordered by the Commission. However, I do believe it accurately  
14 describes where the industry must head if an efficient industry structure is  
15 to develop and the benefits of competition are to be fully realized.

16 Q. Is that why you state that your "PLU" plan is a transitional arrangement?

17 A. Yes. As I have just explained, the marginal price of what is currently  
18 referred to as "switched access" decreases under the plan I have  
19 proposed and becomes one and the same with the price of what is  
20 currently called "local exchange service." In one sense, the rate structure  
21 closely resembles the restructured switched local transport charges with  
22 connectors paying a flat-rated monthly recurring charge for the entrance  
23 facility to the first point of switching and a usage sensitive charge  
24 thereafter. Of course, it also looks very much like the traditional local  
25 measured service rate structure for end users employed by local  
26 exchange companies throughout the rest of the world.

1 I believe it is important to begin the transition to this type of pricing  
2 structure as soon as possible. This is why GTE Hawaiian Tel has  
3 proposed a usage sensitive rate structure be made applicable to Shared  
4 Tenant Service arrangements. It is also one of the reasons that I very  
5 much oppose new entrants' frequently made proposals for a zero-rated  
6 marginal price of a "local minute" of traffic from interconnected carriers.  
7 Establishing a zero price for such usage is certainly in the financial  
8 interest of the newly interconnected companies, but does nothing to  
9 facilitate the transition to an economically efficient overall product line  
10 and rate structure which I described earlier. In addition, the use of a zero  
11 marginal price will certainly lead to network inefficiencies and less  
12 infrastructure development. This is a critical issue, given that this docket  
13 was initiated as an investigation into the infrastructure in Hawaii.

14 Q. Would the plan you are suggesting result in the geographic deaveraging  
15 of prices for economic efficiency?

16 A. Yes. Where the costs of providing service differs on a geographic basis,  
17 efficient pricing would require that prices differ as well. It is frequently  
18 cited that charging different prices to different customers where the costs  
19 are the same is price discrimination. It is less frequently observed that  
20 charging the same price to everybody when costs vary is a case of price  
21 discrimination as well. Even without the competitive entry of new firms,  
22 the geographic deaveraging of prices promotes economic efficiency.  
23 With competitive entry, it is virtually a requirement for GTE Hawaiian Tel  
24 to successfully compete, especially if the new entrants engage in the  
25 niche marketing of services.

1 Q. Is the Company's position regarding deaveraging consistent with the  
2 current designation of base rate areas and non-base rate areas?

3 A. Yes. As stated, geographic deaveraging recognizes that differences  
4 exist in the cost of providing service to different areas. The designation of  
5 base rate areas and non-base rate areas is an example of how these  
6 cost differences are already recognized in the Company's tariffs.  
7 Whether the current distinction of base rate areas and non-base rate  
8 areas will continue to be necessary or appropriate will depend on the  
9 Commission's determination regarding issues in this proceeding such as  
10 universal service.

11 Q. Do the rate rebalancing and rate structure changes you propose have  
12 any other consequences in connection with the issues raised in this  
13 docket by the Commission?

14 A. Yes. In addition to the advantages and the relationship to resale of  
15 services which I have already pointed out, the nonlinear, multipart rate  
16 structure I have proposed, along with the rate rebalancing issues, makes  
17 the issues associated with network unbundling much easier to deal with.  
18 My proposal explicitly takes into account the substitutability and  
19 complementary nature of the Company's product line when developing  
20 the prices and products to be offered. This is in direct contrast to the  
21 current practice in many jurisdictions of basing prices on the identity of  
22 the customer. I have already pointed out the benefits of avoiding cross-  
23 subsidization associated with the integrated rate structure proposal. Of  
24 course, there are certain exceptions, as in the case of funded or reduced  
25 rate access for schools, medicine, and government.

1 Q. How does GTE Hawaiian Tel believe that telecommunications services  
2 for schools, medicine and government should be funded?

3 A. Special funding for schools, libraries, medical facilities and government  
4 has been an issue debated at both the national and state level as interest  
5 in the "information superhighway" has grown. GTE Hawaiian Tel  
6 believes that the support necessary for such activities has been provided  
7 by both private sector and public sector funding. Private sector funding  
8 has been provided as a means to support the communities in which we  
9 live and work. Public sector support has been provided using General  
10 Fund appropriations or proceeds from state and local debt offerings in  
11 pursuit of attaining public policy goals. We believe that such a "public-  
12 private sector" partnership should continue. However, to avoid  
13 unsustainable cross subsidies, the public sector must implement any  
14 special funding by means of explicit mechanisms that are competitively  
15 neutral. If this is not the case, the benefits of competition will not be  
16 realized.

17 Q. What process should the Commission follow in order to fully consider the  
18 issue of funded or special rate access by schools, libraries, medical  
19 facilities, and government?

20 A. GTE Hawaiian Tel recommends a focused approach to such funding that  
21 would limit eligibility to those areas where the most benefit can be  
22 derived from the dollars to be spent. Today's educational needs are  
23 great and resources must be stretched to meet those needs. Therefore, it  
24 appears reasonable at this time to limit funded or special rates to public  
25 schools, kindergarten through high school (K-12), and libraries. This  
26 core group is a reasonable starting point because needs assessment,